THE MINISTER OF STATE IN THE MINISTRY OF EARTH SCIENCES (SHRI PRITHVIRAJ CHAVAN) : (a) Yes, Sir.

(b) The National Institute of Ocean Technology (NIOT) an autonomous body of the Ministry of Earth Sciences has indigenously designed developed and demonstrated the desalination technology for conversion of sea water into potable water based on Low Temperature Thermal Desalination System (LTTD). The LTTD is a process under which the warm surface sea water is flash evaporated at low pressure and the vapour is condensed with cold deep sea water. The estimated cost of production of Kavaratti Plant was 10 paise per litre.

(c) Yes, Sir. A LTTD plant with a capacity of 1 lakh litre per day production of fresh water was developed and installed in May 2005, at Kavaratti, Lakshadweep Island which is a land based plant. Another plant of 1.0 lakh liter per day capacity was set-up at North Chennai Thermal Power Station in Chennai in May 2009.

(d) Does not arise.

Inflow in Himalayan Rivers

3537. SHRI PRAKASH JAVADEKAR : Will the Minister of EARTH SCIENCES be pleased to state:

(a) whether Government has taken any exercise to monitor the inflow in Himalayan rivers to determine whether there is any reduction in the volume of water due to the impact of global warming;

(b) whether any detailed survey has been carried out about the shrinking of the Himalayan glaciers, the main source of major rivers;

(c) if so, the detals thereof; and

(d) if not, whether Government has any plan to carry out the survey?

THE MINISTER OF STATE IN THE MINISTRY OF EARTH SCIENCES (SHRI PRITHVIRAJ CHAVAN): (a) to (c) River flow from glacierzed areas in the Himalaya is influenced both by annual variations in precipitation (snow/rain) and temperature, and by longer term changes in glacier ice. High specific discharge from ice melt often dominates flow for considerable distances downstream, particularly where other sources of runoff are limited, given the difference in climate between the drier western and monsoonal eastern ends of the region. The Himalayan eco-system (snow and ice) supports three major river systems, Indus, Ganges and Brahmaputra & Barak having an average annual stream flow of 7.31 Billion cubic meters (BCM), 525.02BCM and 585.60BCM respectively. Preliminary studies have been taken up in this regard by the Central Water Commission (CWC) and National Institute of Hydrology (NIH), Roorkee.

Glaciers, in general, including the Himalayan glaciers, are receding. Geological Survey of India (GSI) has been conducting studies on the recession of the Gangotri glacier since 1935 or so and this glacier is one of the best documented glaciers for its recession in Indian Himalayas. In the eastern Himalayas, which sit in the Ganga basin, have reported glacier melts.

The rate of shrinking of 30.2 km. long Gangotri Glacier in the last three decades has been found to be more than the rate during the earlier decades. Range of recession for this period is about 18-25 meter/year. Wadia Institute of Himalayan Geology (WIHG) is studying the melting of Himalayan Glaciers in the Garhwal Himalaya, namely, Dokriani and Chorabari glaciers. The Dokriani and Chorabari glacier have been receding at an average rate of 17.5 m/year between 1991 and 2005, and 10m/year between 2003 and 2006 respectively.

The major part of the river discharge is contributed by snowfall and precipitation which is likely to change with global warming. The continuous retreat of glaciers may lead to marginal shortage of water in the Himalayan Rivers.

(d) In additional to the above, the National Action Plan on Climate Change (NAPCC) envisages launching a Mission for sustaining the Himalayan Eco-system to evolve management measures for sustaining and safeguarding the Himalayan glaciers and mountain eco-system. The Mission is expected to seek to understand, whether and the extent to which, the Himalayan glaciers are in recession and how the problem could be addressed.

Allegation of Indian Interference in Baluchistan

†3538. SHRI SHREEGOPAL VYAS : Will the Minister of EXTERNAL AFFAIRS be pleased to state:

(a) whether Pakistan has made an allegation of Indian interference in Baluchistan region;

(b) whether this topic was raised during the meeting held at the time of Prime Minister's last foreign visit;

(c) if so, whether this was denied at that time; and

(d) the reaction of the Government if this allegation was levelled later on?

THE MINISTER OF STATE IN THE MINISTRY OF EXTERNAL AFFAIRS (SHRIMATI PRENEET KAUR) : (a) and (b) Yes.

(c) Yes

(d) The allegations are unfounded. We have no interest in destablizing Pakistan and our conduct is an open book.

Relationship with China

3539. SHRI KUMAR DEEPAK DAS : Will the Minister of EXTERNAL AFFAIRS be pleased to state:

(a) whether Government is aware of the fact that a spat of recent editorials has blamed India for ratcheting up tension on the Indo-China border at Arunachal Pradesh;

(b) whether it is a fact that IAF deployed Sukhoi fighter in Tezpur and there is a growing feeling of tensions of war in the mind of local people of the area;

†Original notice of the question was received in Hindi.